















Copper Valley Telecom: A Snapshot of a Rural Carrier

Cooperative since 1961

- o Copper Valley Telephone Cooperative
- o Copper Valley Wireless
- Copper Valley Long Distance
- o Copper Valley Solutions

9,600 square miles within Wireline Service Area

- o 6 exchanges
- o 20 communities
- o Over 4,000 access lines
- o Rural: 0.7 people/square mile

15,000 square miles within wireless network

- o 30 cell sites
- o 3G CDMA network
- 4G LTE deployment Fall 2013
- o Rural: 0.6 people /square mile

Over 360 miles of fiber cable 2 major microwave paths

- Valdez to Cordova (approx. 100 miles)
- o Chitina to McCarthy (approx. 60 miles)

Broadband serves over 1,800 customers

Land of Extremes

- o Temperatures from +80F to -50F
- Average annual snowfall in Valdez: 325 inches
- 2 to 4 hours drive time between exchanges
- Remote sites accessible only by helicopter and fixed wing aircraft

CVT Serves Key Rural Stakeholders

- City of Valdez

 terminus of the Trans Alaska Oil Pipeline System (TAPS)
- Oil tankers transporting North Slope oil to market
- 8 federally recognized Native tribal organizations
- O Copper River Basin
- O 7,400 Total Population
 - o 30% Alaska Native
 - o 6.3% of households below poverty level
 - o 63% of households in one exchange below poverty level
- O Wrangell-St. Elias National Park(largest park in U.S.)
- o Prince William Sound & its robust fishing industry
- Alaska Marine Highway
- Tourism businesses

Full Service Communications

- o Broadband up to 18MB/1MB
- Landline
- Long Distance
- O Wireless Data
- Wireless Voice & Text Messaging
- Ethernet, T1, DS3, OC3
 Dedicated Circuits





Copper Valley Telecom Deploys State of the Art Telecommunications Technology to Best Serve Our Customers

Wireline

Network Components

- o Fiber and microwave infrastructure
- Soft switches
- Fiber to major institutions including hospitals, schools, and government
- Shorter loops
 - Fiber to the node
 - o Field trial fiber to the home
- O Broadband reach:
 - o 95% 3 mbps
 - o 85% 10 mbps
 - o 55% 15-18 mbps
- Video caching to maximize efficiency
- Redundant pathways

E911 Provider





Prince William Sound Microwave

- Terrestrial connectivity to Tatitlek, a remote Alaska Native village in Prince William Sound
- Provides high speed Broadband to community
- O Will support 4GLTE in Fall 2013

Wireless

Network Components

- Fiber and microwave foundation
- O 30 cell sites
- o 3G CDMA wireless today
- o 4G LTE deployment Fall 2013
- Fixed Wireless for hard to reach locations
- Nationwide roaming partners for voice & data
- Verizon LTE in Rural America (LRA) program participant

Cellular on Wheels (COW)

These mobile towers are available for fast emergency deployment for disasters such as oil spills and earthquakes.

The units are routinely deployed during winter on Thompson Pass, a busy ski and snowmobiling area, for increased public safety.

The units are routinely deployed during summer to Denali Highway, a busy fishing and boating area, for increased public safety.

Alternative Energy

Solar

CVT utilizes solar energy at 6 cell sites and 3 ancillary sites. As much as 50% of annual energy required to operate some sites is solar power.

Wind Trials

CVT is testing the viability of wind power at 2 sites.

Customer Care

Copper Valley provides affordable rates and excellent, accessible customer service and technical support.

- Three stores
- Service visits to remote communities
- Website
- Toll Free Number
- 24/7 Technical Support
- © Educational Sessions
- Tiered pricing for all lifestyles and budgets
- Lifeline and LinkUp discounts
- Accessible to people with disabilities



CVT wireless network improves safety, saves lives

In 2010, three back country skiers were caught in an avalanche near Thompson Pass. Two of the skiers searched for and found the third. She was completely buried and in grave condition. After extracting her from the snow, one skier used her Copper Valley cell phone to call a ski tour operator located miles away who was able to dispatch a rescue helicopter. The victim was flown to the Valdez hospital. It was relayed to us that without the quick rescue, made possible by the use of Copper Valley's cell service, this incident would likely have resulted in death.

In 2013, a fisherman capsized on the frigid (40 degree) Copper River. The strong current swept him down river four miles for approximately 20 minutes. During his odyssey, he fought to remain above water, losing strength with each passing minute. Finally, a charter boat captain who had been called by authorities via cell phone to assist with the search saw the fisherman's arm reaching out of the water. The captain was able to rescue the man and save his life. Later, the fisherman stated to news reporters that he was "grateful to his family friends who carried cell phones and got the search launched."

"The technician that came out [to install service] was great. He explained everything to us." Copper Center, AK

"CVT is my favorite telephone company. They are great!" Valdez, AK
"They aren't only nice people, they are competitive. I am very happy." Glennallen, AK
"The customer service representative that assisted us was very helpful. She just made it all so easy." McCarthy, AK

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